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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/388,123	08/31/1999	ISAAC SAIAS	9392-0011-99	3415

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EXAMINER

BRODA, SAMUEL

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 11/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/388,123

Applicant(s)

SAIAS, ISAAC

Examiner

Samuel Broda

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,7-9 and 14-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,7-9 and 14-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### DETAILED ACTION

1. Claims 1, 7-9, and 14-33, added or amended in a Preliminary Amendment dated 28 August 2000, have been examined.

### *Drawings*

2. The Draftsperson has objected to the drawings; see the copy of Form PTO-948 for an explanation.

### *Claim Rejections - 35 U.S.C. § 112, First Paragraph*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3.1 Claims 1, 7-9, and 14-33 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

3.2 Regarding independent claims 1, 14, and 19, the disclosure fails to provide any information regarding:

1. the choice of a value of the integer " $n$ " used to calculate the  $n$ -th eigenvector of the matrices that will lead to an accurate result and avoid the problem of diffusion; and
2. the calculation of a "connectivity threshold" used to detect an emergent concept.

The Specification states on page 7 line 25 that "in step 110, the method 100 of the present invention selects a value for  $n$ " and additionally states at lines 30-35 that other values of  $n$  are selected. (See also flowchart of Fig. 1). The Specification provides no description regarding how each value of  $n$  is selected, although page 7 lines 17-18 states that "[l]arge order eigenvectors such as the 50<sup>th</sup> non-principal eigenvector do a beautiful job at isolating smaller communities."

Additionally, even if the Specification taught one skilled in the art how to select a proper value of  $n$  to accurately locate an emergent concept, the Specification fails to state what kind of calculations are performed on the eigenvectors to derive a "connectivity threshold" corresponding to a collection of sites.

Taken as a whole, only with undue experimentation could one reasonably skilled in the art make and/or use the invention, because of the omissions in the subject matter described in the Specification.

3.3 Claims 7-9, and 15-18, and 20-33 are dependent on one of independent claims 1, 14, and 19, and are rejected using the same analysis.

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***Claim Rejections - 35 U.S.C. § 112, Second Paragraph***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4.1 Regarding claims 1, 7-9, and 14-33, the term “minimum connectivity threshold” is a relative term which renders each claim indefinite. This term is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

***Indication of Allowable Subject Matter***

5. Subject to rejections listed above, and based on the prior art located to date and made of record, claims 1, 7-9, and 14-33 do not appear to be taught or rendered obvious, and is indicated as allowable subject matter.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. Reference to Agrawal et al, U.S. Patent 6,233,575 issued 15 May 2001 and filed on 23 June 1998, is cited as teaching a method of organizing a database into a hierarchy of topics.

Reference to Botafogo et al, “Structural Analysis of Hypertexts: Identifying Hierarchies and Useful Metrics”, ACM Transactions on Information Systems, Vol. 10 No. 2, pp. 142-180 (April 1992), is cited as teaching metrics used to indicate the intrinsic interconnectedness of hypertext documents.

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Reference to Weiss et al, "HyPursuit: A Hierarchical Network Search Engine that Exploits Content-Link Hypertext Clustering", Proceedings of the 7<sup>th</sup> ACM Conference on Hypertext, pp. 180-193 (1996), is cited as teaching similarity-based clustering using a hyperlink similarity function.

Reference to Chen, "Structuring and Visualising the WWW by Generalised Similarity Analysis", Proceedings of the 8<sup>th</sup> ACM Conference on Hypertext, pp. 177-186 (1997), is cited as teaching generalized similarity analysis.

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samuel Broda, whose telephone number is (703) 305-1026. The Examiner can normally be reached on Mondays through Fridays from 8:00 AM – 4:30 PM.


If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kevin Teska, can be reached at (703) 305-9704. The fax phone numbers for this group are:

(703) 746-7238 --- for communications after a Final Rejection has been made;

(703) 746-7239 --- for other official communications; and

(703) 746-7240 --- for non-official or draft communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist, whose telephone number is (703) 305-3900.

  
SAMUEL BRODA, ESQ.  
PATENT EXAMINER